

MEGHALAYA POWER LIMITED

Corporate Office : Satyam Tower, 3 Alipore Road, 1st Floor, Unit No. 9B, Kolkata-700027

Ref: MPL (1 X 43 MW)/LUM/ EHS/2024-25/08

Dated: 14/06/2024

To,

The Member Secretary,
Meghalaya State Pollution Control Board
'ARDEN', Lumpynggad,
Shillong, Meghalaya – 793014

Subject : Submission of Environmental Monitoring Report for the month of May, 2024.

Reference : MPCB/CON-64/2011/2021-2022/145, Dated. Shillong, the 22nd September, 2021.

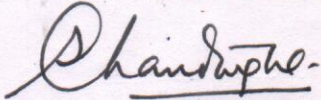
Dear Sir,

This is in reference to above cited subject, we are hereby submitting the monthly Environmental monitoring reports of Ambient Air Quality monitoring including meteorological data, Stack Emission, Fugitive Emission & Water (Ground, Surface, STP & ETP) quality monitoring reports of **Meghalaya Power Limited (43 MW)** for the month of **May, 2024**.

Kindly acknowledge receipt of the same.

Thanking You,

Yours truly,
For **Meghalaya Power Limited**



Sharat Chandra Singha
Asst. General Manager Works

Enclosed: As mentioned above

Copy To: The Regional Director, Central Pollution Control Board (CPCB), North Eastern Zonal Office, 'TUMSIR', Lower Motinagar, Shillong, Meghalaya-790314.



MEGHALAYA POWER LIMITED

Lumshnong, Meghalaya

Date (DD-MM-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Manual Rain (mm)
01-05-2024	716.2	73.4	20.2	45.8
02-05-2024	718.5	73.5	20.4	97.0
03-05-2024	721.3	73.6	20.6	0.0
04-05-2024	720.4	73.7	20.8	6.2
05-05-2024	720.6	73.8	21.0	27.4
06-05-2024	720.8	73.9	21.2	16.2
07-05-2024	721.0	74.0	21.4	0.0
08-05-2024	721.2	72.5	21.6	0.0
09-05-2024	721.4	72.1	21.8	0.0
10-05-2024	721.6	74.6	22.0	0.0
11-05-2024	721.8	75.1	22.2	8.2
12-05-2024	722.0	76.2	21.5	0.0
13-05-2024	722.2	74.5	22.1	0.0
14-05-2024	722.4	74.3	22.6	0.0
15-05-2024	722.6	71.2	21.3	0.0
16-05-2024	718.2	70.7	20.2	0.0
17-05-2024	716.1	70.1	20.4	0.0
18-05-2024	714.0	69.6	19.8	6.2
19-05-2024	716.5	69.0	19.7	0.0
20-05-2024	717.6	70.2	19.5	0.0
21-05-2024	718.7	70.5	19.3	0.0
22-05-2024	719.8	70.8	19.1	0.0
23-05-2024	720.9	71.1	18.9	0.0
24-05-2024	722.0	71.4	18.7	0.0
25-05-2024	723.1	71.7	21.3	0.0
26-05-2024	724.2	72.0	22.4	12.6
27-05-2024	725.3	72.3	23.5	55.0
28-05-2024	726.4	72.6	24.6	148.2
29-05-2024	723.6	72.9	25.7	155.0
30-05-2024	721.4	73.2	24.3	198.3
31-05-2024	719.2	73.5	22.9	43.8
			Total	819.9

	MEGHALAYA POWER LIMITED (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
			Revision No.	5
AMBIENT AIR QUALITY MONITORING REPORT			Date of Rev.	01.12.2020
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/14			May-24	
Location of Sampling: Near ADM Office (South)		GPS Coordinate: 25°10'34"N 92°23'46"E		
Sampling Duration:	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
03.05.2024	46.00	17.60	2.75	6.98
07.05.2024	43.20	17.30	2.70	6.16
10.05.2024	40.90	17.80	2.88	5.21
14.05.2024	37.10	18.30	2.75	4.80
15.05.2024	33.20	18.60	2.82	4.49
18.05.2024	30.40	19.00	2.92	5.54
20.05.2024	28.40	19.70	2.83	6.13
25.05.2024	27.90	20.00	2.68	7.30
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)
Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.				
 Analysed by		 Checked by		 Verified By

	MEGHALAYA POWER LIMITED (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
			Revision No.	5
	AMBIENT AIR QUALITY MONITORING REPORT		Date of Rev.	01.12.2020
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/14			May-24	
Location of Sampling: Near STP		GPS Coordinate: 25°10'49"N 92°23'58"E		
Sampling Duration:	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
03.05.2024	52.14	22.47	3.10	10.39
07.05.2024	49.35	23.98	2.85	10.83
10.05.2024	46.56	25.49	2.85	10.80
14.05.2024	43.77	27.00	2.97	8.78
15.05.2024	40.98	28.51	2.95	7.01
18.05.2024	44.25	30.02	2.91	9.57
20.05.2024	47.52	27.41	3.02	8.12
25.05.2024	50.79	26.48	2.80	7.56
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)
Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.				
 Analysed by		 Checked by		 Verified By

	MEGHALAYA POWER LIMITED (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
			Revision No.	5
AMBIENT AIR QUALITY MONITORING REPORT			Date of Rev.	01.12.2020
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/14			May-24	
Location of Sampling: Near Piezometer Well		GPS Coordinate: 25°10'35"N 92°23'53"E		
Sampling Duration:	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
03.05.2024	47.5	18.6	2.51	14.65
07.05.2024	46.9	19.0	2.34	14.47
10.05.2024	48.7	19.7	2.45	13.55
14.05.2024	49.5	20.0	2.38	12.87
15.05.2024	46.8	19.8	2.30	8.82
18.05.2024	43.8	19.1	2.27	6.57
20.05.2024	43.7	18.5	3.17	5.88
25.05.2024	44.8	17.8	3.18	5.44
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m³)	60 (µg/m³)	80 (µg/m³)	80 (µg/m³)
Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.				
 Analysed by		 Checked by		 Verified By

	MEGHALAYA POWER LIMITED (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
	GROUND LEVEL AMBIENT AIR QUALITY MONITORING REPORT		Date of Issue:	24.08.2013
			Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/14			May-24	
Location of Sampling: Near ADM Office		GPS Coordinate: 25°10'34"N 92°23'46"E		
Sampling Duration:	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
03.05.2024	23.7	10.7	2.16	13.85
07.05.2024	25.9	10.2	3.11	23.75
10.05.2024	30.6	10.9	3.07	22.76
14.05.2024	36.1	12.1	3.25	16.37
15.05.2024	41.4	13.5	2.90	12.83
18.05.2024	44.4	14.6	3.18	11.49
20.05.2024	43.1	14.5	2.99	7.08
25.05.2024	38.2	13.2	2.36	7.26
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)
Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.				
 Analysed by  Checked by  Verified By				

	MEGHALAYA POWER LIMITED (43MW) Lumshnong, Meghalaya		Reference No.		MPL/Env/F – 01
			Issue No.		1
			Date of Issue:		24.08.2013
			Revision No.		5
GROUND LEVEL AMBIENT AIR QUALITY MONITORING REPORT			Date of Rev.		01.12.2020
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/14			May-24		
Location of Sampling: Behind DM Plant			GPS Coordinate: 25°10'43"N 92°23'50"E		
Sampling Duration:	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	
03.05.2024	33.6	15.0	2.85	12.17	
07.05.2024	34.2	16.6	2.97	11.67	
10.05.2024	33.7	17.0	2.95	14.82	
14.05.2024	33.0	15.5	2.91	16.09	
15.05.2024	33.4	15.8	3.02	12.71	
18.05.2024	38.0	16.8	2.80	12.00	
20.05.2024	43.2	17.0	3.12	10.31	
25.05.2024	50.0	20.4	3.22	8.80	
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)	
Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.					
 Analysed by		 Checked by		 Verified By	

	MEGHALAYA POWER LIMITED (43 MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F-02
			Issue No.	1
			Date of Issue:	01.05.2019
	STACK EMISSION MONITORING ANALYSIS REPORT		Revision No.	5
Date of Rev.			01.06.2021	
Report No: MPL(43MW)/ENV/STACK/MONTHLY/2024-25/14			Month:	May
<u>Analysis Result</u>				
A. General Information About Stack				
1	Stack Identification No			43 MW
2	Stack Connected to			Boiler
3	Material of Construction (Stack/Duct)			RCC
4	Shape of duct			Circular
5	Whether duct is provided with permanent platform & ladder			Yes
B. Physical characteristic of stack				
1	Stack Height from ground level (meter)			81.0
2	Duct diameter at sampling point (meter)			2.75
3	Sampling height point from ground level (meter)			45.5
4	Cross sectional area of Duct/Stack (m ²)			5.94
C. Pollution Control Device				
1	Details of pollution control device attached to stack			ESP
D. Result of Sampling & Analysis of Gaseous Emission				
1	Date of Sampling			18.05.2024
2	Ambient Temp (°C)			28
3	Stack Gas Temp (°C)			120
4	Exit Velocity of Gas (m/sec.)			15.8
5	Flow Rate (Nm ³ / sec.)			68.4
6	Quantity of Emission (Nm ³ / Hr)			239481.3
7	Concentration of PM (mg/Nm ³)			28.4
8	Concentration of SO ₂ (mg/Nm ³)			487
9	Concentration of NOx (mg/Nm ³)			245
10	Oxygen (O ₂) (%)			10.4
E. Remarks:				
Standard				
PM - 50 mg/Nm³		SO₂ - 600 mg/Nm³		NOx - 300 mg/Nm³
<i>Particulate Matter (PM), Sulphur di-oxide (SO₂), Oxide of Nitrogen (Nox), Electro Static Precipitator (ESP)</i>				
 Analysis by  Checked by  Authorized Signatory				

	MEGHALAYA POWER LIMITED Lumshnong, Meghalaya		Document No.	MPL/EHS/Env/F-04
			Date of Issued	01-05-2019
			Revision No.	2
	FUGITIVE EMISSION MONITORING REPORT		Revision Date	01-01-2021
Ref: MPL(43MW)/ENV/FUGITIVE/MONTHLY/2024-25/14				
Month - May				
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline	
			Limit	
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)	
14.05.2024	Coal Storage Section	1530	2000	
 Analyzed By  Checked By  Verified By				

	MEGHALAYA POWER LIMITED (43 MW) Lumshnong, Meghalaya					Document No.		MPL/EHS/Env/F-03		
						Date of Issued		01-05-2019		
						Revision No.		04		
	NOISE LEVEL MONITORING REPORT					Revision Date		01-01-2021		
Ref: MPL(43MW)/ENV/NOISE/MONTHLY/2024-25/14						Date:		30.05.2024		
Month - May										
S. No.	Location	Measured Values dB(A) Day time (6:00am to 10:00pm)			Norms In dB(A)	Measured Values dB(A) Night time (10:00pm to 6:00am)			Norms in dB(A)	
		Min.	Max.	Avg.		Min.	Max.	Avg.		
A	Plant									
1	Turbine House Ground Floor	68.2	70.0	67.0	75	65.1	69.0	62.9	70	
2	Turbine House 9 Mt.	65.4	69.1	66.5		57.0	62.4	62.3		
3	RO – MCC	57.2	61.2	68.7		52.0	55.3	63.5		
4	Boiler Ground Floor	68.2	70.2	68.6		59.0	62.4	62.9		
5	CHP – MCC	57.4	64.2	68.8		52.0	55.2	56.0		
6	Office Area	60.1	65.2	64.4		53.4	56.0	58.4		
 Analyzed by  Checked By  Verified By										

	MEGHALAYA POWER LIMITED Lumshnong, Meghalaya				Reference No.	MPL/EHS/F-04
					Issue No.	1
	WATER TESTING REPORT				Date of Issue:	24.08.2013
					Revision No.	3
					Date of Rev.	01.06.2019
Reference No.: MPL/ENV/WATER/MONTHLY/2024-25/14					Date of sample collection: 10.05.2024	
					Date of Analysis: 11.05.2024 to 14.05.2024	
Sl.No.	Parameter	Unit	STP Inlet	STP Outlet	Standard Norms For Discharge of Environment Pollution (Notification Date: - 19th May 1993) & Consent To Operate vide letter no. MPCB/TB-900 (Pt-II)/2014- 2015/34 - dated Shillong, the 3rd Sep,2014	
1	pH	-	7.0	7.4	5.5 to 9.0	
2	Colour	Hazen	Yellowish	Colourless	-	
3	Odour	-	Odourless	Odourless	-	
4	Chloride	mg/L	76.5	80.4	-	
5	Total Hardness as CaCO ₃	mg/L	58.6	51.2	-	
6	Suspended Solids	mg/L	70	26.0	100	
7	Total Dissolve Solids	mg/L	360	296	-	
8	Chemical Oxygen Demand	mg/L	120	43	250	
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	75	12.0	30	
10	Oil & Grease	mg/L	2.1	<2	10	
11	Temperature	° C	25	25	Shall not exceed 5.0°C above the receiving water temperature	
12	Conductivity	µS/cm	450	480	-	
 Analysis By  Checked By  Verified By						

	MEGHALAYA POWER LIMITED Lumshnong, Meghalaya			Reference No.	MPL/EHS/F-04
				Issue No.	1
	WATER TESTING REPORT			Date of Issue:	24.08.2013
				Revision No.	3
			Date of Rev.	01.06.2019	

Reference No.: MPL/ENV/WATER/MONTHLY/2024-25/14

Date of sample collection: 10.05.2024
Date of Analysis: 11.05.2024 to 14.05.2024

Sl.No.	Parameter	Unit	ETP Outlet	Standard Norms For Discharge of Environment Pollution (Notification Date:- 19th May 1993) & Consent To Operate vide letter no. MPCB/TB-900 (Pt-II)/2014-2015/34 – dated Shillong, the 3rd SEP, 2014.
1	pH	-	7.5	5.5 to 9.0
2	Suspended Solids	mg/L	40	100
3	Total Dissolve Solids	mg/L	326	-
4	Chemical Oxygen Demand	mg/L	40	250
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	16	30
6	Oil & Grease	mg/L	<2	10


Analysis By


Checked By


Verified By



WATER TESTING REPORT

Issue No.	1
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Date of Issue:	24.08.2013
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Revision No.	3
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Date of Rev.	01.06.2019
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Surface Water Analysis Results

Date of Analysis: 16.05.2024 to 20.05.2024

S.No.	Parameter	Unit	Umtyrngai Nallah		Umutha Nallah		Umso Nalah	Umbadoh	Tongseng	Lumshnong	Wahiajer	Standards norms as per IS 2296
			Up Stream	Down Stream	Up Stream	Down Stream	Down Stream	Seasonal Spring / Seasonal Nallah				
1	pH	-	7.6	8.3	7.6	8.0	8.5	7.7	7.2	7.6	7.5	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	10
3	Odour	-	Unobjectionable								Unobjectionable	Unobjectionable
4	Chloride	mg/L	26.1	27.3	26.4	26.9	27.1	27.2	27.4	27.5	27.7	250
5	Total Hardness as CaCO ₃	mg/L	52.3	53.1	53.9	54.7	55.5	65.1	80.2	82.3	45.2	300
6	Suspended Solids	mg/L	5.3	8.4	2.5	5.4	14.0	6.0	8.0	11.2	2.8	-
7	Total Dissolve Solids	mg/L	300.1	245.4	265.0	298.0	315.0	300.0	323.0	350.0	225.0	500
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.0
9	Oil & Grease	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
10	Temperature	° C	25.0	25.0	25.0	25.0	25.0	25.9	25.9	25.9	25.0	-
11	Conductivity	µS/cm	395.0	310.0	440.0	480.0	505.0	380.0	460.0	490.0	350.0	-
12	Flow	L / Min	6504.5	16525.2	7132.4	6625.3	15690.4	-	-	520.1	-	-

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Analyzed by

Checked by

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Verified by